



Hurrells Specialist Seeds for Organic Growers 2007



Hurrell and McLean Seeds are licensed seed producers





Hurrells
Specialist Seeds

Introduction

“The market for organic products is generally buoyant and expanding. Retail sales of organic produce are now worth approx. £1.2 billion per year with considerable opportunity for import substitution through increasing home production. All the available evidence suggests that for the foreseeable future the UK organic market will continue to increase and many farmers and growers may be missing a good business opportunity if they do not give serious thought to organic production.

Not only could converting your farm help improve your businesses profitability, but it could also result in improvements in biodiversity, agricultural diversity and employment as well as helping to play a key part in the re-connection of agriculture with the public.” source DEFRA 2006

Hurrell and McLean Seeds have built up an un-rivalled reputation, supplying growers with high quality seeds. Over the past 10 years we have increased the range of seed crops produced organically, and

indeed were one of the first companies in the UK to obtain organic kale seed. Now we are able to boast a range of forage grasses, legumes, green manures, forage brassicas, cereals and even organic entry level mixtures and wildflower mixtures. We are a licensed seed processor under The Soil Association and are also signed up with Flora Locale which aims to promote good practice in the use and sourcing of British and Irish wild flora for all projects in those countries that have wildlife in mind.

The use of organically produced seed for 2007

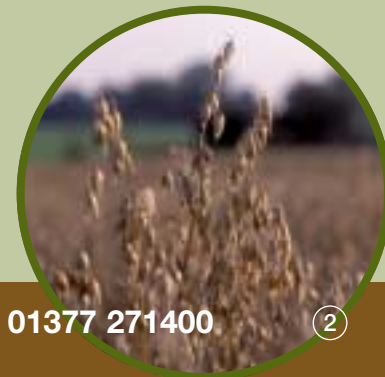
The use of organic seed is governed by EU regulation 2092/91 which stipulates that organic seed must be used in production. However, due to the lack of seed across Europe a derogation has been put in place, which stipulates that conventionally produced seed can be used where no organic seed exists. In the case of grass seed mixtures, a minimum percentage inclusion of 60% or more organically produced seed must

be included to negate the necessity for permission from their certifying body before purchasing.

Although a derogation form is still required, it can be submitted retrospectively, knowing that derogation will be granted.

Some useful numbers:

- Organic Conversion Information Service (OCIS) on **0117 922 7707**
- Soil Association Certification Ltd on **0117 914 2412**
- Organic Farmers and Growers Ltd on **01743 440512**
- Flora Locale on **01423 712 946**



Organic Grass Ley Mixtures

Short Term Mixtures - Forage Express

- 3.2 kg LIGRANDE, Italian Ryegrass
- 2.0 kg MERIBEL, Italian Ryegrass
- 3.8 kg GEMINI (Tet) Italian Ryegrass
- 2.0 kg MERIAN/MERVIOT, Red Clover
- 1.0 kg CONTEA, Crimson Clover
- 10.0 kg AMETHYSTE, Vetch

22.0 kg/acre (54.36 kg/ha)

- 1 year mixture
- Large yields in a short time
- Clovers help to produce high protein feed
- Excellent residual nitrogen for ploughing in

Organic Short Term

- 3.5 kg LIGRANDE, Italian Ryegrass
- 3.5 kg TETRAFLORUM (Tet), Italian Ryegrass
- 2.8 kg TWYBLADE (Tet), Hybrid Ryegrass
- 1.7 kg FOXTROT, Late Perennial Ryegrass
- 2.0 kg MERVIOT/MERIAN, Red Clover

13.5kg/acre (33.36kg/ha)

- 1-2 year mixture
- High yields of quality hay or silage
- Good aftermath grazing
- Will improve soil structure and fertility
- Weed suppressing, thick-bottomed sward

Organicmax Silage Express (100% Organic)

- 6.0kg LIGRANDE, Italian Ryegrass
- 3.0kg AUBADE, Westerwolds
- 2.0kg MERVIOT, Red Clover
- 1.0kg CONTEA, Crimson Clover
- 8.0kg AMETHYSTE, Vetch

20kg/acre (49.41kg/ha)

- 100% Organically produced seed
- 1 year high protein silage/hay mixture
- Can be sown from March until August
- Establishes in 8-10 weeks

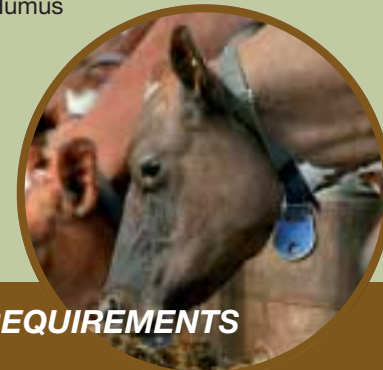
Replenishes soil nitrogen when ploughed in

Organic Soil Improver

- 1.5 kg MERIAN, Broad Red Clover
- 1.0 kg ALTASWEDE, Late Flowering Red Clover
- 0.5 kg ALICE, Large Leafed White Clover
- 3.0 kg CALIBRA (Tet), Intermediate Perennial Ryegrass
- 1.0 kg MAGICIAN (Tet), Intermediate Perennial Ryegrass
- 3.0 kg TIVOLI (Tet), Late Perennial Ryegrass

10kg/acre (24.71kg/ha)

- 2 year mixture
- Will improve soil structure and fertility
- Weed suppressing, thick-bottomed sward
- Excellent Humus production



Medium and Long Term Mixtures

60% Organic Medium Term

- 3.5 kg ABERECHO (Tet), Hybrid Ryegrass
- 2.5 kg BREE, Intermediate Perennial Ryegrass
- 2.5 kg CALIBRA (Tet), Intermediate Perennial Ryegrass
- 1.5 kg FOXTROT, Late Perennial Ryegrass
- 1.5 kg ELGON (Tet), Late Perennial Ryegrass
- 0.5 kg BARBLANCA, Medium White Clover
- 0.5 kg CRUSADER, Medium White Clover
- 0.5 kg MERWI, Medium White Clover

13.0kg/acre (32.12kg/ha)

- 3-4 year mixture
- Large cuts of hay or silage
- Highly palatable and digestible forage
- Open growth habitat of grasses to encourage clover growth

60% Organic Long Term

- 1.5kg PREMIUM, Intermediate perennial ryegrass
- 2.5kg CALIBRA (Tet), Intermediate perennial ryegrass
- 2.8kg FOXTROT, late perennial ryegrass
- 1.9kg TWYMAX (Tet), Late perennial pyegrass
- 2.5kg MILLENIUM (Tet), Late perennial ryegrass
- 0.5kg BARBLANCA, Medium white clover
- 0.5kg MERWI, Medium white clover
- 0.5kg RIVENDEL, Small white clover

13.0kg/acre (32.12kg/ha)

- 5 year plus mixture
- Persistent and high yielding year after year
- Highly palatable and digestible forage ideal for grazing
- Can also be cut for hay or silage
- Clover will add protein, minerals & trace elements





Medium and Long Term Mixtures

Organicmax Long Term (100% Organic)

2.0kg	BREE, Intermediate perennial ryegrass
1.5kg	CALIBRA (Tet), Intermediate perennial ryegrass
2.0kg	ROMARK, Late perennial ryegrass
2.5kg	MILLENIUM (Tet), Late perennial ryegrass
1.8kg	FOXTROT, Late Perennial Ryegrass
1.0kg	CLIMAX, Timothy
1.0kg	KASPER, Meadow Fescue
2.0kg	HUIA, Medium leafed white clover

13.8kg/acre

- 100% organically produced seed
- Unique to Hurrells
- Suits a wide range of soil types
- No retrospective derogation required

60% Organic Permanent Pasture

1.5kg	KIMBER, Early perennial ryegrass
2.0kg	BREE, Intermediate perennial ryegrass
1.5kg	CALIBRA (Tet), Intermediate perennial ryegrass
3.0kg	ROMARK, Late perennial ryegrass
2.5kg	MILLENIUM (Tet), Late perennial ryegrass
1.0 kg	ERECTA, Timothy
1.5 kg	SIGMUND, Meadow Fescue
0.5 kg	MERVOT Broad Red Clover
1.0 kg	CRUSADER, Medium White Clover
0.5 kg	RIVENDEL, Kent Indiginous Small leaved wild white clover

15kg/acre (37.06kg/ha)

- Long term mixture for cutting and grazing
- Suits a wide range of soil types
- Season long production due to wide range of heading dates
- Timothy included for its high palatability
- Meadow Fescue enhances mid season digestibility

60% Ranger Organic Poultry

2.0kg	BREE, Intermediate perennial ryegrass
3.0kg	CALIBRA (Tet), Intermediate perennial ryegrass
2.0kg	FOXTROT, Late perennial ryegrass
3.0kg	MILLENIUM (Tet), Late perennial ryegrass
1.0kg	Slender Creeping Red Fescue
1.0kg	Chewings Fescue
1.0kg	Crested Dogstail
0.5kg	Small Leaved Timothy
0.5kg	Crimson clover
0.5kg	MERIAN, Red clover
0.25kg	KENT, Small leaf white clover

14.75kg/acre (36.44kg/ha)

- For organic poultry fields.
- Clovers will attract insects and provide interest for birds to peck at.
- Thick bottom with excellent root structure for birds to scratch about.
- Very drought tolerant
- Improves soils

Medium and Long Term Mixtures

60% Organic Cockle Park

- 1.0 kg KIMBER, Early perennial ryegrass
- 1.5 kg BREE, Intermediate perennial ryegrass
- 2.5 kg CALIBRA (Tet), Intermediate perennial ryegrass
- 2.0 kg FOXTROT, Late perennial ryegrass
- 3.0 kg MILLENIUM (Tet), Late perennial ryegrass
- 1.5 kg AMBA, Cocksfoot
- 1.0 kg SIGMUND, Meadow Fescue
- 0.5 kg ERECTA, Timothy
- 0.5 kg MERVIOT/MERIAN, Red clover
- 0.5 kg MERWI, Medium leafed white clover
- 0.5 kg CRUSADER, Medium leafed white clover
- 0.5 kg RIVENDEL/KENT, Small leafed white clover

15 kg/acre (37.06 kg/ha)

- Long term cutting and grazing
- Suited to light and poorer soils
- Excellent drought tolerance

- Will persist with very good ground cover
- Improves soils

60% Organic Overseeder

- 1.5 kg LIGRANDE, Italian ryegrass
- 3.0 kg TWYBLADE (Tet), Hybrid ryegrass
- 3.0 kg CALIBRA (Tet), Intermediate perennial ryegrass
- 2.1 kg ORION (Tet), Int perennial ryegrass
- 0.4 kg TWYMAX (Tet), Late perennial ryegrass
- 0.5 kg ALICE, Large white clover
- 0.5 kg MERWI, Medium white clover

11.0kg/acre (27.18kg/ha)

- For repairing and rejuvenating old and damaged swards.
- Fast establishing.
- Will improve pastures that have had a poor take.

60% Organic Arable Silage

- 50% Organic Spring Barley
- 40% Protein Pea
- 10% Organic protein Pea

100%

- Sow at 60kg/acre (148.25kg/ha)
- Barley can be substituted with oats if preferred
- Cut and ensile 12 weeks from sowing
- Large, high quality silage yields
- Can be undersown with a grass ley
- Peas leave residual nitrogen in soil



Organic Legumes

- Convert atmospheric Nitrogen into a plant useable form
- Reduce nitrogen fertiliser use
- Improve soil structure
- Suitable for low input and less intensive farming
- Suitable for grazing and conservation
- High quality feed with high protein and digestibility
- High animal intake and performance
- Saves on energy useage thereby reducing environmental harm
- Promotes greater biodiversity
- Contain more minerals, such as magnesium
- Reduced nitrogen loss to the environment

Organic Clover Seed

Huia white clover

- Medium leafed New Zealand white clover
- One of the quickest establishing white clovers
- Enhances lean meat gain and milk protein

Merviot Broad Red

- Nitrogen fixing
- Releases large amounts of N for following crop when ploughed
- Used in cutting mixtures as much more erect
- Will last two years
- High yielding
- High in protein
- Good disease resistance

Crimson Clover

- Nitrogen fixing
- Resistant to clover rot
- Erect growth habit
- Tolerates a wide range of soil pH
- Dislikes waterlogged and heavy soils
- 6kgs/acre into Autumn stubbles for sheep grazing
- Usually used as a green manure crop
- Also in wildflower meadows
- Attracts a wide range of insects

Organic Clover Blends

Moo Clover Blend

60% Grasslands Huia white clover
 20% Alice Large leaf white clover
 20% Crusader medium white clover

Ovine Clover Blend

60% Grasslands Huia white clover
 20% Merwi medium leaf white clover
 20% Kent small leaf white clover

*clover blends are 60% organic and will require retrospective derogation

Other Organic Legumes

Amethyste Vetch

- Grows very quickly
- Used in silage mixtures or as green manure
- High protein - ideal in arable silage mixtures
- Sow at 40kgs/acre

Gea Lucerne

- Grown for hay or silage
- Average dry matter yield 14-15tonnes/ha
- Very high protein (crude protein is 20-22%)
- Fixes nitrogen
- Excellent in drought conditions and on light soils
- 3-4 cuts per year
- Will last 5 years
- Requires bacterial inoculation when drilled
- Can also be sown with Meadow Fescue and Timothy
- Sow 6-7kg/acre until mid August

Brassicas & Root Crops

Kales

- Kale is an ideal winter feed for strip grazing cattle and sheep
- Kale has been very successfully round baled and ensiled
- Average dry matter yield 8-10 tonnes/ha
- Average fresh yield 60-65 tonnes/ha
- Sow in March/April at 2-3kg/acre
- Susceptible to flea beetle attack so it is worth looking at Garlic treatments and trap crops

Marrowstem Organic

- Traditional variety
- Very good winter hardiness
- *Organic seed*

Merlin

- Kestrel type triple cross hybrid
- High digestibility,
- High leaf to stem ratio
- Pre Christmas grazing
- Derogation required

Proteor

- Winter hardy
- Post Christmas feeding.
- Derogation required

Swedes

- Grown for human consumption and winter animal feed
- Prefer cool moist climate
- Average dry matter yield 7-10 tonnes/ha
- Average fresh yields 70-80 tonnes/ha

Airlie

- Uniform bulb size
- Ideal for Human consumption – tasty
- Dark Red skin & yellow flesh - liked by supermarkets
- Fed to sheep / Good mildew resistance

Kenmore

- Huge bulbs / Extremely winter hardy
- Suitable for early and late grazing
- Overall yield 20-30% more than any other variety
- Excellent mildew resistance



Brassicas & Root Crops

Stubble Turnips

- Can be spring or summer sown
- 12 weeks to maturity
- Provides nutritious highly palatable feed for livestock
- Livestock will improve fertility of soil for next crop
- Different varieties can be fed at different periods
- Average dry matter yield 4.0 tonnes/ha
- Metabolisable energy = 11MJ/kg DM
- Sowing rate @ 2-3kg/acre



White Star

- White fleshed globe type
- Erect strap leaves
- Tremendous yields
- Pre Christmas grazing

Frisia

- Purple skinned intermediate type
- Large tops and much root above ground mean good feed yield
- Very winter hardy
- Will feed through to March

*Non-organic, untreated stubble turnip which seed can be sown under derogation

Forage Rape

- Economical crop with a wide sowing window
- Low seed rates and inputs
- Excellent autumn and winter feed for lamb finishing
- Pioneer crop for upland reclamation projects
- Average dry matter yield 3.5 tonnes/ha
- Metabolisable energy 10-11MJ/kg DM
- Ideal Flea Beetle “trap crop” around Kale
- Sowing rate 2kgs/acre

*Sparta and Akela are untreated conventional seed requiring derogation

*Sparta

- Club root resistant
- High D-value
- Extremely palatable
- Derogation required

Broad Leaf Essex Organic

- Traditional variety
- Performs well in low fertility
- Organic seed

*Akela

- High vigour seed
- Early maturing
- Good on harsh cold sites
- Derogation required

Green Manure Crops

Green manures are crops grown within a rotation for the purposes of:

- Building soil organic matter and soil structure
- Supplying nitrogen and other nutrients for a following crop
- Preventing leaching of soluble nutrients from the soil
- Providing ground cover to prevent damage to soil structure
- Bringing crop nutrients up from lower soil profiles
- Smothering weeds and preventing weed seedling growth



Fodder Radish

- Very fast establishing
- Fully grown in 8 to 9 weeks
- A deep tap root brings up nutrients from the subsoil
- Dies off in the winter and can be ploughed in during the Spring
- Club root resistant
- Sow at 4kg/acre

Mustard

- Very quick to establish
- Establishes on a wide range of soil types
- Quite drought tolerant
- Can be used from March to September
- Must be treated as a brassica in rotations
- Sow at 5-6kg/acre

Phacelia

- Sow by late August
- Produces dense foliage
- Flowers attract a wide range of insects including bees and hoverflies
- Deep, fine roots ideal for soil conditioning
- Killed by frost
- Can be ploughed in during the spring
- Sow at 5kg/acre

Organic Entry Level Stewardship

- The aim is to encourage a large number of organic farmers across a wide area of farmland to deliver simple yet effective environmental management.
- Similar to ELS but recognises the greater environmental benefit that organic farming systems deliver.
- The land to be entered into the scheme must be farmed organically and registered with an approved Organic Inspection Body before an application to OELS is made.
- Is a voluntary, non-competitive scheme.
- Payment of £60 per hectare, per year on land registered with an Organic Inspection Body.
- Aid for converting conventionally farmed improved land and established top-fruit orchards (planted with pears, plums, cherries and apples, excluding cider apples) is also available as a top-up to OELS payments. Payment rates are £175 per hectare per year for two years for improved land and £600 per hectare per year for three years for established top fruit orchards.
- Farmers with a mix of organic and conventional land can apply for OELS on their OELS eligible land and ELS on the remainder at the applicable ELS payment rates as part of one, whole farm, OELS agreement.
- Five year agreements with payments sent out every six months.
- You will receive a payment of £60 per hectare per year for all the organic land you enter into the scheme. In return for these payments, you will be required to deliver 60 'points' worth of management options per hectare of this organic land.
- OELS will be administered by Natural England from regional centres.

Organic Entry Level Mixtures

Hurrells are proud to announce that we can offer many of the Entry Level Mixtures using the necessary 60% organically produced and certified seeds inclusion.

EF7 Organic Entry level mix with Cocksfoot

- 20% ORGANIC MEADOW FESCUE
- 20% ORGANIC TIMOTHY
- 20% ORGANIC COCKSFOOT
- 20% CREEPING RED FESCUE
- 20% AMENITY TALL FESCUE

100%

EF7 Organic Entry Level mix no Cocksfoot

- 20% ORGANIC MEADOW FESCUE
- 20% ORGANIC TIMOTHY
- 20% ORGANIC CREEPING RED FESCUE
- 20% AMENITY TALL FESCUE
- 20% SHEEPS FESCUE

100%

EF2 Organic Wild Bird Mixture

- 60% ORGANIC TRITICALE
- 10% SPRING BARLEY
- 10% PROTEOR/BICAULOR KALE
- 10% CARMEN QUINOA
- 10% NIKO MILLET BLEND

100%

This mixture will provide a valuable food source for seed eating birds. The aim is to provide at least 3 seed sources for birds in an arable landscape. This mixture has 60% organic seeds inclusion within it.



Cereal Seeds

We are able to supply a range of organically produced Spring and Autumn sown cereal and pulse varieties. These can be supplied in 50kg, 1/2 ton and 1 ton bags delivered to farm.

SPRING WHEAT

Amaretto

- Milling variety
- High yielder
- Medium height straw

Tybalt

- Excellent yields
- Feed variety
- Popular variety

Paragon

- Leading quality spring wheat
- Popular with millers
- Long and stiff strawed
- Good all round disease resistance

SPRING OATS

Atego

- New variety which has performed well in NIAB
- Very stiff strawed
- Excellent Crown Rust resistance
- Good all rounder

Firth

- Popular variety especially in the north
- Excellent grain quality
- Good overall disease resistance

Cereal Seeds

SPRING BARLEY

Westminster

- New variety
- Malting quality
- Yields well for livestock feed
- A real dual purpose variety

Dandy

- Very tall strawed
- Ideal for livestock farms
- Very popular

Doyen

- Stiff strawed
- Feed variety

Cellar

- Traditional malting variety
- Very popular

SPRING PULSES

Nitouche Peas

- Excellent feed variety
- Very good in arable silage

Fuego Beans

- Very high yielding
- New introduction



For information about Autumn cereal seed crops for 2007 in the ground please call us. Obviously supply of Autumn cereal varieties is subject to a successful harvest.

Hurrell & McLean Seeds Ltd - Beverley Road, Cranswick, Driffield, East Yorkshire, YO25 9PF
Telephone: 01377 271400 Fax: 01377 271500 Email: info@hmseeds.com

www.hmseeds.com